

Title (en)

FREEZER COMPRISING INDEPENDENT AUXILIARY THERMOSIPHON FOR INEXPENSIVELY EXTENDING ACTIVE COOLING TO ADDITIONAL FREEZER INTERIOR WALLS

Title (de)

GEFRIERSCHRANK MIT UNABHÄNGIGER HILFSTHERMOSIPHON ZUR KOSTENGÜNSTIGEN, AKTIVEN KÜHLUNG FÜR ZUSÄTZLICHE GEFRIERSCHRANKINNENWÄNDE

Title (fr)

CONGÉLATEUR AVEC THERMOSIPHON AUXILIAIRE INDÉPENDANT POUR UN REFROIDISSEMENT ACTIF S'ÉTENDANT DE MANIÈRE PEU COÛTEUSE VERS DES PAROIS INTÉRIEURES DE CONGÉLATEUR SUPPLÉMENTAIRES

Publication

**EP 3724563 B1 20220112 (EN)**

Application

**EP 18888547 A 20181016**

Priority

- US 201715837504 A 20171211
- US 2018056092 W 20181016

Abstract (en)

[origin: US2019178558A1] An auxiliary thermosiphon has an auxiliary refrigerant conduit with an auxiliary evaporation segment in thermally conductive connection to an interior wall of the freezer. The auxiliary refrigerant conduit contains an auxiliary refrigerant that is isolated from the primary refrigerant of the primary cooling apparatus. The auxiliary refrigerant conduit also extends upward to an auxiliary condensation segment of the auxiliary refrigerant conduit at an elevation above the auxiliary evaporation segment. A thermal bridge is in physical thermal contact with the auxiliary condensation segment and in physical thermal contact with a portion of a primary evaporation segment of the primary refrigeration apparatus. Heat is transported through the thermal bridge from the auxiliary thermosiphon to the primary refrigerant conduit and consequently to the primary refrigeration apparatus for removal from the freezer.

IPC 8 full level

**F25D 19/00** (2006.01); **F25D 11/02** (2006.01)

CPC (source: EP US)

**F25B 7/00** (2013.01 - US); **F25B 25/005** (2013.01 - US); **F25D 11/022** (2013.01 - US); **F25D 11/025** (2013.01 - EP US); **F25D 16/00** (2013.01 - US); **F25D 17/02** (2013.01 - US); **F25D 19/00** (2013.01 - EP US); **F25D 23/061** (2013.01 - US); **F25D 23/068** (2013.01 - US); **F28D 7/0025** (2013.01 - EP); **F28F 1/00** (2013.01 - US); **F28D 2021/0068** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 10718558 B2 20200721**; **US 2019178558 A1 20190613**; CN 111448436 A 20200724; CN 111448436 B 20210611; EP 3724563 A2 20201021; EP 3724563 A4 20210127; EP 3724563 B1 20220112; JP 2021508365 A 20210304; JP 6992195 B2 20220113; WO 2019118063 A2 20190620; WO 2019118063 A3 20200326

DOCDB simple family (application)

**US 201715837504 A 20171211**; CN 201880079896 A 20181016; EP 18888547 A 20181016; JP 2020550587 A 20181016; US 2018056092 W 20181016